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CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 174/286 9607 10/734,474 12/12/2003 Ali H. Burney EXAMINER 05/05/2005 36981 7590 FISH & NEAVE IP GROUP CHANG, DANIEL D **ROPES & GRAY LLP** PAPER NUMBER ART UNIT 1251 AVENUE OF THE AMERICAS FL C3 NEW YORK, NY 10020-1105 2819

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.  10/734,474  BURNEY, ALI H.  Examiner  Daniel D. Chang  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.	1.
Office Action Summary  Examiner  Daniel D. Chang  2819  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.	1.
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<ul> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).         Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).     </li> </ul>	
Status	
1) Responsive to communication(s) filed on <u>12 December 2003</u> .	
2a) This action is <b>FINAL</b> . 2b) This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits in	;
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.	
Disposition of Claims	
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-20 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.	
Application Papers	
9) The specification is objected to by the Examiner.	
10)⊠ The drawing(s) filed on <u>12/12/03</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.	
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(	I).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119	
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>	
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Attachment(s)	
Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)	
Paper No(s)/Mail Date  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)  Paper No(s)/Mail Date	

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## **Drawings**

The drawings are objected to as failing to comply with 37 CFR 1.84(i) & 37 CFR 1.84(p) because lines, numbers & letters are not uniformly thick and well defined, clean, durable, and black (poor line quality). Also, some characters are too small. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Donlin et al. (US 2005/0021749 A1, Donlin hereinafter).

Regarding claim 1, Donlin discloses in Figs. 1-4, a programmable logic resource (100) comprising:

an input/output (I/O) buffer (106B) that receives data from circuitry external to the programmable logic resource and generates a plurality of outputs;

a crossbar switch (406; Par. 0032-0033) that receives the plurality of outputs from the I/O buffer and generates a plurality of outputs, wherein the crossbar switch is configured to send at least one of the plurality of outputs from the I/O buffer to a corresponding one of the plurality of outputs of the crossbar switch;

an intellectual property block (107, 111) that receives the plurality of outputs of the crossbar switch for processing.

Regarding claim 2, Donlin discloses in Figs. 1-4, that the programmable logic resource of I/O buffer:

receives the data at I/O ports (106B) located along the periphery of the programmable logic resource; and

decodes (inherent for IOBs) the data to generate the plurality of outputs.

Regarding claim 3, Donlin discloses in Figs. 1-4, a package (IC; Par. 0002) in which the programmable logic resource is mounted.

Regarding claim 4, Donlin discloses in Figs. 1-4, that the package has pins (408) through which the circuitry external to the programmable logic resource sends data, wherein the data is further routed from the pins to the I/O buffer (Par. 0031+).

Regarding claims 5-8, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Claims 9-15 and 17 are essentially the same in scope as apparatus claims 1-8 and are rejected similarly.

Regarding claim 16, Donlin discloses that signal is a low voltage differential signal (Par. 0019).

Regarding claim 18, configuring the crossbar switch during initial configuration of the programmable logic resource is inherent for the FPGA of Donlin.

Regarding claim 19, configuring the crossbar switch during reconfiguration of all or part of the programmable logic resource is inherent for the FPGA of Donlin.

Regarding claim 20, dynamically adjusting the crossbar switch while data is processing in the programmable logic resource is inherent for the FPGA of Donlin.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (571) 272-1801. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel D. Chang Primary Examiner

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PRIMARY EXAMINER